

Fuel Facts

**National Biodiesel Board** 

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## Practical Alternative for Marine Market

Biodiesel use in the marine market can be practical and safe. In its pure form, biodiesel is less harsh on marine environments, and safer for boaters to handle and store. The marine industry consumes about 10 percent of the petroleum diesel in the U.S.

- **Biodiesel can work in several marine factions.** Because biodiesel can replace or blend with petroleum diesel with little or no engine modifications, it is a viable alternative to several categories of the marine industry, including: recreational boats, inland commercial and ocean-going commercial ships, research vessels and the U.S. Coast Guard Fleet. Today, much of the emphasis is on recreational boats, which consume about 95 million gallons of diesel fuel annually.
- **Biodiesel is a safe alternative.** Biodiesel has a higher flash point more than 300 degrees versus about 125 degrees Fahrenheit for regular #2 diesel. Biodiesel also offers low-pressure storage at ambient temperatures, handles like diesel and is safer to transport.
- **Biodiesel has higher lubricity.** Biodiesel blended at a 20 percent rate with petroleum diesel has a lower wear scar than traditional fuel. At the 20 percent blend level, biodiesel shows improved lubricity with low sulfur petroleum diesel containing high or low aromatic levels. Start-up, power, range and cold-weather performance characteristics are similar to diesel.
- **Biodiesel is "user-friendly."** The use of biodiesel and biodiesel blends results in a noticeable change in exhaust odor. The reduction in smell and change of odor are easier on ship workers and pleasure craft boaters. In fact, it's been compared to the smell of french fries. Users also report having no eye irritation. Since biodiesel is oxygenated, diesel engines have more complete combustion than with petroleum.
- Biodiesel can help boaters meet regulations.

**Emissions.** The Clean Air Act allows the Environmental Protection Agency (EPA) to assess the contribution of non-road emissions to air pollution. EPA proposes to include marine diesel compression-ignition engines in the same regulatory framework as land-based, non-road compression-ignition engines. Biodiesel lowers emissions in these engines.

**Regulatory Liability.** The Oil Pollution Act of 1990 increases the civil and criminal penalties for causing spills and for violating many marine safety and environmental protection laws. The law applies to all vessels, and fines up to \$10,000 per day may be levied against serious offenders. Biodiesel, when spilled, does less harm to the environment.

